

Work was commenced during the year on the duplication of the Papakura-Horotiu and Plimmerton-Paekakariki sections of the main line. Work on the Turakina-Okoia deviation was commenced just prior to the 1936-37 financial year.

This deviation will shorten the existing line by $3\frac{1}{2}$ m., and will provide improved grades and curvature. It leaves the existing railway at the northern end of the Turakina Station Yard, crosses the Turakina and Wangaehu Rivers and the Wangaehu Valley, and rejoins the existing line $1\frac{1}{2}$ m. on the Fordell side of the Okoia Station. Camps have been erected, and carpenters', fitting, and blacksmiths' shops have been established at Fordell. Three wells to supply water to the various camps have been sunk, service roads to both portals of the Turakina and Fordell tunnels have been formed and metalled, together with access roads to the camps. A total of 3 m. of earthwork has been completed, and the approaches to the Fordell tunnel, a short tunnel at 5 m., and the southern end of the Turakina tunnel are well in hand. Five miles of permanent fencing have been completed and 518 lineal feet of culverts placed. An average number of 219 men was employed during the period.

HYDRO-ELECTRIC DEVELOPMENT.

Construction work in this branch of the Department's activities has been mainly concentrated on completion of the extension for two 21,000 kilowatt units at Arapuni, and on extensions of transmission-lines to North Auckland and to Westland.

As indicated in my report of last year, there has been considerable activity in gold-mining in Westland and the demand for power has increased enormously. The local supply authority, the Grey Electric-power Board, has found it impossible to meet all demands made upon it. To cope with this position the transmission-line from Lake Coleridge is being extended to the West Coast, but some difficulty is being experienced in maintaining deliveries of poles.

To meet the urgent demand, the Diesel generating-station of 5,760 kw. previously located in Lyttelton has been transferred to the West Coast, and is being installed at Dobson. The Government has also made arrangements to purchase the local hydro-generating plant belonging to the Grey Electric-power Board, and this will be taken over and operated under Government control when the Dobson Diesel plant is ready for operation, and the Government can assume responsibility for the whole supply of power in bulk to this area.

Another important event in the electrical section was the purchase of the whole of the generating-works and reticulation of the Southland Electric-power Board. I indicated in my previous report that negotiations to this end were in hand. Before deciding on this step a referendum of ratepayers in the Southland area was taken to see if the change of control from Board to Government was favoured locally. As the result was overwhelmingly in favour of acquisition by the Government, the works were taken over early in October, and have since been operated under Government control.

Until such time as this system can be connected to the general Government system by means of a transmission-line between Dunedin and Gore, it has not been possible to do a great deal to stimulate the business in the area, as it would not be possible to supply any great increase in power-demand. There is, however, already an indication that there will be a considerable increase as soon as extra power is available, and the whole organization and basis of charges is being reviewed with a view to generally increasing and improving the supply in the area.

In addition to the direct purchases of the works of the Southland and Grey Electric-power Boards mentioned above, arrangements have also been made during the year with Palmerston North, Taumarunui, and Whakatane by which local plants in those areas will be closed down so that additional power can be taken from the Government system.